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<120> CONTROLLING AVAILABILITY OR ACTIVITY OF PROTEINS BY USE OF PROTEASE INHIBITORS OR RECEPTOR FRAGMENTS

<130> 2183-4525US

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<150> PCT/NL99/00136

<151> 1999-03-12

<150> EP98200799.9

<151> 1998-03-12

<160> 50

<170> PatentIn version 3.0

<210> 1

<211> 8

<212> PRT

<213> Unknown organism

<220>

<221> BINDING

<222> (1)..(8)

<223> synthetic peptide, Binding polypeptide motif

<220>

<221> MISC\_FEATURE

<222> (2)..(2)

<223> The amino acid E can be replaced by D

<220>

<221> MISC\_FEATURE

<222> (3)..(3)

<223> The amino acid F can be replaced by Y

<220>

<221> MISC\_FEATURE

<222> (4)..(4)

<223> The amino acid I can be replaced by L, V or F

<220>

<221> MISC\_FEATURE

<222> (7)..(7)

<223> The amino acid D can be replaced by E

<400> 1

Xaa Glu Phe Ile Xaa Xaa Asp Xaa

1

5

<210> 2

<211> 12

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<212> PRT  
<213> Unknown Organism

<220>

<223> Unsure, Growth hormone receptor binding motif, Binds to hormone receptor and ubiquitin

<400> 2

Asp Asp Ser Trp Val Glu Phe Ile Glu Leu Asp Ile  
1 5 10

<210> 3

<211> 10

<212> PRT

<213> Unknown Organism

<220>

<223> Unsure, Growth hormone receptor motif, Binds to hormone receptor and ubiquitin

<400> 3

Asp Ser Trp Val Glu Phe Ile Glu Leu Asp  
1 5 10

<210> 4

<211> 129

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, Growth hormone receptor motif, Up-regulates GH activity

<400> 4

Ser Lys Gln Gln Arg Ile Lys Met Leu Ile Leu Pro Pro Val Pro Val  
1 5 10 15  
Pro Lys Ile Lys Gly Ile Asp Pro Asp Leu Leu Lys Glu Gly Lys Leu  
20 25 30  
Glu Glu Val Asn Thr Ile Leu Ala Ile His Asp Ser Tyr Lys Pro Glu  
35 40 45  
Phe His Ser Asp Asp Ser Trp Val Glu Phe Ile Glu Leu Asp Ile Asp  
50 55 60  
Glu Pro Asp Glu Lys Thr Glu Glu Ser Asp Thr Asp Leu Leu Ser Ser  
65 70 75 80  
Asp His Glu Lys Ser His Ser Asn Leu Gly Val Lys Asp Gly Asp Ser  
85 90 95  
Gly Arg Thr Ser Cys Cys Glu Pro Asp Ile Leu Glu Thr Asp Phe Asn  
100 105 110  
Ala Asn Asp Ile His Glu Gly Thr Ser Glu Val Ala Gln Pro Gln Arg  
115 120 125  
Leu

<210> 5

<211> 38

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, Derived from protein receptor, Up-regulates GH activity

<400> 5  
 Lys Asp Gly Asp Ser Gly Arg Thr Ser Cys Cys Glu Pro Asp Ile Leu  
 1 5 10 15  
 Glu Thr Asp Phe Asn Ala Asn Phe Ile His Glu Gly Thr Ser Glu Val  
 20 25 30  
 Ala Gln Pro Gln Arg Leu  
 35

<210> 6  
 <211> 10  
 <212> PRT  
 <213> Unknown organism

<220>  
 <223> Unsure, Glut4 Ins-regulated glucose transporter binding motif, Binds to ubiquitin/proteasome system binding site

<400> 6  
 Thr Glu Leu Glu Tyr Leu Gly Pro Asp Glu  
 1 5 10

<210> 7  
 <211> 7  
 <212> PRT  
 <213> Unknown organism

<220>  
 <223> Unsure, Binding poly-peptide motif, Binds to ubiquitin/proteasome system binding site

<400> 7  
 Cys Glu Glu Asp Phe Tyr Arg  
 1 5

<210> 8  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens (human) or Lepus unknown species (rabbit)

<220>  
 <223> GHR sequence

<400> 8  
 Ser Trp Val Glu Phe Ile Glu Leu Asp Ile  
 1 5 10

<210> 9  
 <211> 10  
 <212> PRT  
 <213> Gallus gallus (chicken)

<220>  
 <223> GHR

<400> 9  
 Leu Trp Val Glu Phe Ile Glu Leu Asp Ile  
 1 5 10

<210> 10

<211> 10  
<212> PRT  
<213> Homo sapiens (human)

<220>  
<223> prolactin receptor

<400> 10  
Leu Leu Val Glu Tyr Leu Glu Val Asp Asp  
1 5 10

<210> 11  
<211> 10  
<212> PRT  
<213> Lepus unknown species (rabbit), Rattus unknown species (rat), Mus musculus (mouse)

<220>  
<223> prolactin receptor

<400> 11  
Leu Leu Val Glu Phe Leu Glu Asn Asp Asp  
1 5 10

<210> 12  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, vertebrate skeletal muscle

<400> 12  
Asp Asn Val Asp Tyr Leu Thr Arg Asp Trp  
1 5 10

<210> 13  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, FGF Receptor Family

<400> 13  
Gln Ala Ala Glu Tyr Leu Arg Ser Glu Thr  
1 5 10

<210> 14  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, Transmembrane receptor sex precursor

<400> 14  
Ile Asp Ala Glu Tyr Ile Ser Ala Glu Arg  
1 5 10

<210> 15  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, IgE Receptor

<400> 15  
Leu Lys Gly Glu Phe Ile Trp Val Asp Gly  
1 5 10

<210> 16  
<211> 10  
<212> PRT  
<213> Unknown organism

C  
<220>  
<223> Unsure, ANGIOTENSIN CONVERTING ENZYME

<400> 16  
Tyr Gly Ser Glu Tyr Ile Asn Leu Asp Gly  
1 5 10

<210> 17  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, POTASSIUM CHANNEL IRK

<400> 17  
Ser Glu Gly Glu Tyr Ile Pro Leu Asp Gln  
1 5 10

<210> 18  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, PDGF RECEPTOR ALPHA-CHAIN

<400> 18  
Asp Gly His Glu Tyr Ile Tyr Val Asp Pro  
1 5 10

<210> 19  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, PDGF RECEPTOR BETA-CHAIN

<400> 19  
Asp Gly His Glu Tyr Ile Tyr Val Asp Pro

1 5 10

<210> 20  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens (human), Lepus unknown species (rabbit), Rattus unknown species (rat)

<220>  
 <223> Ca++ -channel

<400> 20  
 Asp Asn Phe Glu Tyr Leu Thr Arg Asp Ser  
 1 5 10

<210> 21  
 <211> 10  
 <212> PRT  
 <213> Unknown organism

<220>  
 <223> Unsure, Cl- CHANNEL CLC7

<400> 21  
 Lys Ile Phe Glu Tyr Leu Arg Arg Asp Thr  
 1 5 10

<210> 22  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens (human)

<220>  
 <223> TYROSINE-PROTEIN KINASE FRK

<400> 22  
 Ser Leu Gln Glu Tyr Leu Gln Asn Asp Thr  
 1 5 10

<210> 23  
 <211> 10  
 <212> PRT  
 <213> Unknown organism

<220>  
 <223> Unsure, GLUT4 INS-REGULATED GLUCOSE TRANSPORTER

<400> 23  
 Thr Glu Leu Glu Tyr Leu Gly Pro Asp Glu  
 1 5 10

<210> 24  
 <211> 10  
 <212> PRT  
 <213> Rattus unknown species (Rat)

<220>  
 <223> MHC-II (BETA)

<400> 24

Asn Gln Glu Glu Tyr Leu Arg Tyr Asp Ser  
1 5 10

<210> 25

<211> 10

<212> PRT

<213> Unkown organism

<220>

<223> Unsure, ERB2 TKR (neu-oncogene)

<400> 25

Glu Asn Pro Glu Tyr Leu Gly Leu Asp Val  
1 5 10

<210> 26

<211> 10

<212> PRT

<213> Unkown organism

<220>

<223> Unsure, ANION TRANSPORTER I

<400> 26

Arg Leu Lys Glu Tyr Leu Ala Gly Asp Val  
1 5 10

<210> 27

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, VASCULAR ENDOTHELIAL GROWTH FACTOR receptor 2

<400> 27

Leu Tyr Lys Asp Phe Leu Thr Leu Glu His  
1 5 10

<210> 28

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, VASCULAR ENDOTHELIAL GROWTH FACTOR receptor 3

<400> 28

Glu Gln Lys Glu Tyr Lys Ser Tyr Asp Ala  
1 5 10

<210> 29

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, G PROTEIN-ACT. INWARD RECTIFIER K+-CHANNEL-1

<400> 29  
Pro Glu Gly Glu Phe Leu Pro Leu Asp Gln  
1 5 10

<210> 30  
<211> 10  
<212> PRT  
<213> Homo sapiens (human)

<220>  
<223> PROTEIN-TYROSINE PHOSPHATASE ZETA

<400> 30  
Ser Asp Ser Glu Phe Leu Leu Pro Asp Thr  
1 5 10

<210> 31  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, GLUTAMATE (NMDA) RECEPTOR SUBUNIT EPSILON 2

<400> 31  
Ser Ala Leu Asp Phe Ile Arg Arg Glu Ser  
1 5 10

<210> 32  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, RHESUS BLOOD GROUP-ASSOCIATED GLYCOPROTEIN

<400> 32  
Ala His Asn Glu Tyr Leu Val Ser Glu Ile  
1 5 10

<210> 33  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>  
<223> Unsure, DIHYDROPYRIDINE-SENSITIVE 1-TYPE, Ca++ Channel

<400> 33  
Val Thr Leu Asp Phe Leu Asp Ala Glu Leu  
1 5 10

<210> 34  
<211> 10  
<212> PRT  
<213> Unknown organism

<220>

<223> Unsure, THROMBOPOIETIN RECEPTOR

<400> 34

Glu Ile Ser Asp Phe Leu Arg Tyr Glu Leu  
1 5 10

<210> 35

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, SEROTONIN RECEPTOR 1B (brain)

<400> 35

Ser Ala Lys Asp Tyr Ile Tyr Gln Asp Ser  
1 5 10

<210> 36

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, EPIDERMAL GROWTH FACTOR receptor

<400> 36

Tyr Gln Gln Asp Phe Phe Pro Lys Glu Ala  
1 5 10

<210> 37

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, SODIUM, CHLORIDE-DEPENDENT TRANSPORTER NTT4

<400> 37

Ser Lys Leu Gln Tyr Ile Leu Ala Gln Ile  
1 5 10

<210> 38

<211> 10

<212> PRT

<213> Unknown organism

<220>

<223> Unsure, RHODOPSIN

<400> 38

Thr Pro Leu Asn Tyr Ile Leu Leu Asn Leu  
1 5 10

<210> 39

<211> 10

<212> PRT

<213> Unknown organism

<220>  
 <223> Unsure, INTERLEUKIN-2 RECEPTOR BETA-CHAIN  
  
 <400> 39  
 Thr Ser Val Asp Leu Leu Asp Ile Asn Val  
 1 5 10  
  
 <210> 40  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, cAMP-DEPENDENT PROTEIN KINASE C, ALPHA, BETA  
  
 <400> 40  
 Gly Thr Pro Asp Tyr Ile Ala Pro Glu Ile  
 1 5 10  
  
 <210> 41  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, cAMP-DEPENDENT PROTEIN KINASE DELTA, EPSILON, GAMMA  
  
 <400> 41  
 Gly Thr Pro Glu Tyr Leu Ala Pro Glu Ile  
 1 5 10  
  
 <210> 42  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, SERINE/THREONINE KINASE PCTAIRE 1,2  
  
 <400> 42  
 Leu Val Phe Glu Tyr Leu Asp Lys Asp Leu  
 1 5 10  
  
 <210> 43  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, SERINE/THREONINE KINASE PCTAIRE 3  
  
 <400> 43  
 Leu Val Phe Glu Tyr Leu Asp Ser Asp Leu  
 1 5 10  
  
 <210> 44  
 <211> 10  
 <212> PRT  
 <213> Unknown organism

<220>  
 <223> Unsure, SMALL GTP-BINDING PROTEIN Rab-7  
  
 <400> 44  
 Ile Gly Ala Asp Phe Leu Thr Lys Glu Val  
 1 5 10  
  
 <210> 45  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, SMALL GTP-BINDING PROTEIN Rab-9  
  
 <400> 45  
 Ile Gly Val Glu Phe Leu Asn Lys Asp Leu  
 1 5 10  
  
 <210> 46  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, SYNAPTOTAGMIN IV  
  
 <400> 46  
 Ile Ser Val Glu Phe Leu Val Leu Asp Ser  
 1 5 10  
  
 <210> 47  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, GLUTAMATE DECARBOXYLASE (GAD67)  
  
 <400> 47  
 Ser Asp Ile Asp Phe Leu Ile Glu Glu Ile  
 1 5 10  
  
 <210> 48  
 <211> 10  
 <212> PRT  
 <213> Unknown organism  
  
 <220>  
 <223> Unsure, FRUCTOSE 1,6 DIPHOSPHATASE (FBPase)  
  
 <400> 48  
 Ala Ile Gly Glu Phe Ile Leu Val Asp Lys  
 1 5 10  
  
 <210> 49  
 <211> 10  
 <212> PRT

<213> Unknown organism

<220>

<223> Unsure, CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR

<400> 49

Gln Lys Gln Glu Tyr Lys Thr Leu Glu Tyr  
1 5 10

<210> 50

<211> 5

<212> PRT

<213> Unknown organism

C1 <220>

<223> Unsure, EPITHELIAL Na+ CHANNEL

con<sup>w</sup> <220>

<221> MISC\_FEATURE

<222> (4)..(4)

<223> Xaa can be any amino acid

<400> 50

Pro Pro Pro Xaa Tyr  
1 5